

7.0 Activity Changes

Each estimate of emissions used in inventory estimation has an activity counterpart. Grams per mile and gram per start emission rates are coupled with miles per day or start per day activity estimates to yield tons per day inventories.

All activity estimates were reviewed and many were revised in preparing EMFAC2000 for release. Although many of the data sources and methods of analysis were maintained, many notable changes were made in this update of the model in contrast to those estimates contained in MVEI7G.

- New population estimates were derived through the analysis of DMV data.
- Registration distributions, the population of vehicles by age, were revised, also using DMV data. The resulting estimates are reported for 45 model years for each vehicle class.
- Vehicle class and county specific mileage accrual rates were derived through the analysis of BAR smog check records.
- Vehicle class specific retention rates, the number of vehicles of a particular model year that remain in the fleet in a given calendar year, were also revised.
- Estimates of vehicle miles of travel for heavy-duty vehicles, buses and motorcycles are calculated in EMFAC2000 as the product of vehicle population and mileage accrual rates.
- EMFAC2000 also incorporates hourly and county specific estimates of temperature, speed, VMT, and humidity.